

In the Claims:

Please amend the claims as follows:

1-25 (cancelled)

26. (currently amended) An embossed pure surface grid structure produced on a non-transparent substrate, said grid structure being arranged to produce for a viewer a holographic or a corresponding visual effect by diffracting light in one or more diffraction orders, each diffraction order corresponding to a certain observing direction of the visual effect observable at a visible wavelength, the ratio of a grid period of said grid structure to said visible wavelength being smaller than 5, wherein said grid structure is arranged to leave a free range of angles such that said grid structure when examined from directions corresponding to said range of angles does not produce for the viewer a clearly observable effect based on diffraction, said grid structure being implemented on said non-transparent substrate without a reflective metal layer on said non-transparent substrate, and wherein a top of said grid structure is not protected with a protective layer.

27. (previously amended) The grid structure according to claim 26, wherein said grid structure is arranged to direct the light diffracted therefrom substantially in only one diffraction order.

28. (previously presented) The grid structure according to claim 26, wherein said free

range of angles is at least 10° .

29. (cancelled)

30. (previously amended) The grid structure according to claim 29, wherein said substrate is made of plastic or lacquer.

31. (previously amended) The grid structure according to claim 26, wherein said grid structure is produced on paper, cardboard or other corresponding substrate.

32. (previously presented) The grid structure according to claim 26, wherein the substrate of said grid structure comprises one or several dielectric thin film coatings on the entire surface area of the substrate or only at the locations corresponding to said grid structure.

33. (currently amended) A method for producing a micro-optical grid structure, said method comprising:

embossing the grid structure on a non-transparent substrate, such that said grid structure is adapted to produce for a viewer a holographic or a corresponding visual effect based on diffracting light in one or more diffraction orders, each diffraction order corresponding to a certain observing direction of the visual effect observed at a visible wavelength, the ratio of the grid period of said grid structure to said visible wavelength being smaller than 5, wherein a free range of angles remains, such that said grid structure when examined from directions corresponding to said range of angles does not produce for the viewer a clearly observable effect

based on diffraction, said grid structure being a pure surface grid structure that has been implemented on said non-transparent substrate without a reflective metal layer on said non-transparent substrate, and wherein a top of said grid structure is not protected with a protective layer.

34. (previously amended) The method according to claim 33, wherein the value of the incidence angle of light impinging upon said grid structure at said visible wavelength is fixed, and the ratio of said grid period (d) and said visible wavelength is selected such that one desired observing direction is attained.

35. (previously presented) The method according to claim 33, wherein the parameters of said grid structure are selected in such a manner that the free range of angles is at least 10°.

36. (previously amended) The method according to claim 33, wherein the diffraction efficiency to said one or more observing directions is modified by the selection of the parameters of said grid structure.

37. (previously presented) The method according to claim 33, wherein the width of said grid profile is selected to be substantially half of said grid period.

38. (previously presented) The method according to claim 33, wherein substantially one quarter of the value of said visible wavelength is selected as the value of the height of said grid profile.

39. (cancelled)

40. (currently amended) A product, comprising:

at least one pattern area formed of a micro-optical grid structure produced on a non-transparent substrate as an embossed pure surface grid structure, said grid structure being arranged to produce for a viewer a holographic or a corresponding visual effect by diffracting light one or more diffraction orders, each diffraction order corresponding to a certain observing direction of the visual effect observable at a visible wavelength, the ratio of the grid period of said grid structure to said visible wavelength being smaller than 5, wherein said grid structure is arranged to leave a free range of angles such that said grid structure when examined from directions corresponding to said range of angles does not produce for the viewer a clearly observable effect based on diffraction, said grid structure being implemented on said non-transparent substrate without a reflective metal layer on said non-transparent substrate, wherein a top of said grid structure is not protected with a protective layer.

41. (previously amended) The product according to claim 40, wherein said product is made of plastic.

42. (previously amended) The product according to claim 40, wherein said product is made of paper, cardboard or a corresponding material.

43. (previously presented) The product according to claim 40, wherein said product is of

packing material.

44. (previously presented) The product according to claim 40, wherein said product is a printed product.

45. (cancelled)

46. (previously presented) The product according to claim 40, wherein the basic material of said product at the same time acts as the substrate of the grid structure.

47. (previously presented) The product according to claim 40, wherein when the product comprises several pattern areas, at least two of said pattern areas have different observing directions and/or design wavelengths.

48. (previously amended) The product according to claim 40, wherein said at least one pattern area forms as an effect a trademark, a logo, or a product description.

49. (previously presented) The product according to claim 40, wherein said at least one pattern area forms as an effect characters or text.

50. (previously presented) The product according to claim 40, wherein said product comprises several adjacent pattern areas that are similar to each other and that are arranged to form together a larger area with a substantially uniform visual effect.

51. (new) The grid structure according to claim 26, wherein said grid structure has a substantially binary grid profile.

52. (new) The method according to claim 33, wherein said grid structure has a substantially binary grid profile.

53. (new) The product according to claim 40, wherein said grid structure has a substantially binary grid profile.